EMM-0800

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Implementation of Documentation Requirements for NEPA

ROCKY FLATS PLANT

September 26, 1990

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

Approved: October 23, 1990

REVIEWED FOR CLASSIFICATION/UCNI
By George H. Setlock
Date 8/6/91 UNU

ADMIN RECORD

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EMM-0800: Implementation of Documentation Requirements for NEPA

Review and Approval Form for Interfacing Organizations

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EMM-0800: Implementation of Documentation Requirements for NEPA

1.0 OBJECTIVE

This procedure is intended to provide for plantwide documentation that is consistent with the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended.

2.0 SCOPE

The scope of this procedure is to describe the process to be used at the Rocky Flats Plant (RFP) for obtaining a determination from the Department of Energy (DOE) of the level of NEPA documentation recommended for RFP projects. This procedure includes a provision for preparation, review, and approval of NEPA documentation. Particular emphasis is given to review and screening of proposed projects to determine which of these projects require preparation of an Action Description Memorandum (ADM) for submittal to the Department of Energy Rocky Flats Office (RFO). An ADM represents an identification of projects that may require extensive NEPA documentation.

3.0 RESPONSIBILITY AND APPROVAL

3.1 All Management

Operations Managers and Managers of all RFP functional groups shall be aware of and adhere to the provisions of this procedure in the planning and implementation of RFP projects. Managers of all RFP functional groups shall provide requested information for appropriate specialty areas in NEPA document development to the extent practicable, and shall review such documents upon request.

For those RFP projects administered by Facilities Project Management, the FPM Project Manager (PM) shall be responsible for ensuring that an appropriate Environmental Checklist is prepared, using the attached forms and guidance, and for ensuring that appropriate RFP and DOE review is obtained.

For those RFP projects not administered by Facilities Project Management, the manager of the functional group initiating the project shall be responsible for ensuring that appropriate NEPA documentation is prepared using the attached forms and guidance, as appropriate, and for ensuring that appropriate RFP and DOE review is obtained.

3.2 NEPA Division of Environmental Restoration

The management of the NEPA Division has the responsibility to obtain and retain documentation related to NEPA for all projects at the Rocky Flats Plantsite, i.e., carry out the instructions of this procedure, and to chair the NEPA Compliance Committee.

Management of the NEPA Division is responsible for assuring that the NEPA process as defined by 10 CFR Part 1021, August 6, 1979; by DOE Order 5440.1C, National Environmental Policy Act; and by this procedure is followed. Further responsibilities of the NEPA Division are to respond to questions concerning the technical aspects of a project, to coordinate subcontractors that may work on the project, and to ensure that comments and responses on documents are consistent and are incorporated into NEPA documentation when appropriate.

3.3 NEPA Compliance Committee

3.3.1 Purpose and Membership

The NEPA Compliance Committee (NCC) is established to provide plant managers with guidance and review for obtaining NEPA documentation.

Managers of the NEPA Division, Safety Analysis, Facilities Project Management (FPM), and the Legal Department shall appoint one member each to serve on the NEPA Compliance Committee. The NCC shall be chaired by a member from the NEPA Division. Managers of each represented group shall ensure that appropriate review of NEPA documentation is provided by their group. At times, the NCC may call upon RCRA/CERCLA Programs to provide a consultant to the NCC for reviews requiring RCRA/CERCLA expertise.

3.3.2 Responsibilities of NCC Members

All regular members of the NCC shall provide review and approval for appropriate NEPA documentation described herein. DOE,RFO and DOE,HQ shall provide guidance, review and approval,as appropriate, for Environmental Checklists (ECs), Action Description Memoranda (ADMs), Environmental Assessments (EAs), and Environmental Impact Statements (EISs). Each member of the NCC has a specific responsibility in the review of new or modified projects on plantsite and in the guidance of preparation of NEPA documentation. These responsibilities are outlined below.

The **Chair of the NCC** shall hold weekly meetings of the NCC to discuss new projects, review ECs and ADMs. The Chair shall maintain appropriate, auditable records of documentation related to NEPA. This documentation shall be prepared in accordance with this procedure. In those instances where clarification of a project would be helpful, the NCC Chair will request a project manager, or appropriate personnel, of the proposed project to attend the NCC meeting and provide clarification when appropriate.

The **FPM** member of the NCC shall have the responsibility of assuring that the technical description of the project is accurate and consistent with the knowledge of the FPM PM. If there are questions with respect to the project engineering, budget, schedule or construction details, FPM will provide the information at the next NCC meeting.

The **Safety Analysis** member of the NCC is to review all ECs and ADMs to ensure that obvious safety issues have been taken into consideration in the construction and operational phases of the project, and to identify unreviewed safety questions.

The **Legal** Department's responsibility to the committee is to ensure that all projects are within the constraints of the applicable environmental laws.

The **RCRA/CERCLA** representative is responsible for reviewing ADMs in light of the potential impact on either RCRA or CERCLA. This representative also has the responsibility to bring to the NCC any projects involved in the CERCLA Remedial Investigation/Feasibility Study (RI/FS) process, so that NEPA procedures can run concurrently with the RI/FS in accordance with DOE Notice 5400.4 (Integration of Environmental Compliance Processes).

3.4 Approval for the NEPA Process

Directors of Environmental Restoration and Facilities Project Management shall provide approval for the NEPA process described herein. DOE,RFO and DOE,HQ shall provide NEPA determinations and approval, as appropriate, for ADMs, EAs, EISs, and any necessary supporting documents.

4.0 SPECIAL CONSIDERATIONS

NEPA, the CEQ Regulations, and the DOE Orders and Guidelines require the early consideration of environmental factors during the planning process for all major federal actions at the Rocky Flats Plant. This procedure provides for Rocky Flats implementation of specialized requirements from several sources:

4.1 National Environmental Policy Act of 1969, as amended (Volume II, Part I of the Guide)

This Act is the basic national charter for protection of the environment for federal actions. The Act establishes the Council on Environmental Quality (CEQ) to oversee federal efforts to comply with NEPA.

4.2 40 CFR Parts 1500-1508 (Volume II, Part I of the Guide)

These Regulations were promulgated by the Council on Environmental Quality for implementing the procedural provisions of NEPA. These CEQ regulations are requirements for submission of NEPA documentation which assist in the evaluation of potential environmental effects. This NEPA documentation includes EAs and EISs.

4.3 10 CFR Part 1021 (Volume II, Part IV-1 of the Guide)

This Regulation pertains to DOE adopting CEQ regulations for its facilities.

4.4 DOE Order 5440.1C (Volume II, Part IV-4 of the Guide)

This Order establishes DOE procedures to implement NEPA.

4.5 DOE NEPA Compliance Guide

This Guide concerns NEPA documentation for DOE facilities. Volume II, Part IV-2 of this Guide, which contains Section D of the DOE Guidelines, identifies classes of DOE actions which normally do not require either an EA or an EIS and, therefore, would be categorically excluded from such NEPA

requirements. Also in this Guide, DOE establishes its own requirement for the document called the "Action Description Memorandum" to be submitted by the DOE facility to DOE-HQ or its authority. The ADM serves as the basis for the determination of the required level of NEPA documentation for proposed actions not exempted by DOE Guidelines under categorical exclusions.

4.6 AL 5440.1B

This Order implements DOE Order 5440.1C for all Albuquerque (AL) facilities. AL 5440.1B gives particular attention to the requirements for preparation of ADMs by AL facilities, outlining the information which should be contained in an ADM and the review and approval paths to which it is subject. Where deemed appropriate by RFO, this Order is applied at Rocky Flats.

4.7 Rocky Flats Plant Policy Manual

The RFP Policy Manual establishes plant policy to comply with applicable health, safety and environment requirements and regulations of the Department of Energy and other recognized federal standards. The Director of Health and Safety develops the plant safety program by publishing the H&S Manual which contains the safety procedures/requirements necessary for safe operations.

4.8 Specific Guidance and Notices Issued by the DOE

DOE issues Secretarial Notices and special guidance regarding NEPA as deemed necessary. RFO or the NEPA Division will provide any such information to users as required.

5.0 POTENTIAL HAZARDS AND SAFETY PRECAUTIONS

Not applicable.

6.0 INSTRUCTIONS

6.1 NEPA Process for the Rocky Flats Plant

6.1.1 Major documents which might be prepared as part of the NEPA implementation process at RFP include the following:

- Environmental Checklist (EC)
- Action Description Memorandum (ADM)
- Environmental Assessment (EA)
- Environmental Impact Statement (EIS)

The documents listed above are in increasing order of sophistication, comprehensiveness, and review requirements. While projects are commonly initiated with an EC, not all projects will necessarily require additional NEPA documentation. Further, at RFO direction, the process can be initiated at any level within the document hierarchy. A flowchart describing the sequence for creation and review of these documents as they pertain to RFP activities is given in Appendix I. The documents are prepared and used in decision-making as indicated below:

Document	Prepared by	Used by	To decide
EC	EG&G	EG&G/DOE	recommendation to RFO
ADM	EG&G	DOE	level of NEPA documentation
EA	EG&G	DOE	if FONSI, or EIS required
EIS	DOE	DOE	Records of Decision

6.1.2 The Facilities Project Management (FPM) Project Manager(PM), or the project initiator (if the proposed project is not submitted to FPM) is responsible for ensuring that appropriate NEPA documentation is prepared for a proposed project. The PM may draw upon support/matrix personnel from the project initiator, appropriate specialty areas, outside contractors, and the RFP NEPA Compliance Committee. The project initiator and support/matrix personnel will provide information for and review of appropriate specialty areas in the NEPA process.

6.2 The NEPA Compliance Committee

6.2.1 The RFP NEPA Compliance Committee will be comprised of the Managers or their designees (with delegation of authority letter) of the following RFP groups:

- NEPA Division
- Facilities Project Management
- Legal Department
- Safety Analysis

RFO and RCRA/CERCLA Programs will provide a representative to assist the NCC. In addition, consultants may be invited and representatives of interested groups may attend NCC meetings.

6.2.2 The NCC will be chaired by the NEPA Division representative. The Chair of the NCC will coordinate the activities of the NCC. The Chair will be responsible for maintaining files on NEPA documentation and decision-making activities. These files will include documents specified in Section 7.0, prepared for RFP projects.

6.2.3 The NCC will provide oversight, guidance, and review for the RFP NEPA process requirements.

6.3 Environmental Checklist

6.3.1 An Environmental Checklist will be completed and submitted to the NCC early in the planning of the project by the FPM PM or project initiator for all RFP line item projects, general plant projects, capital equipment, expense, and other projects which have potential for environmental impacts.

6.3.2 A copy of the format for the EC is given in Appendix II. The completed EC will be submitted to the NCC. Results of the NCC review will be documented on the NEPA Compliance Committee Environmental Checklist Review Form (ECRF) (Appendix III).

6.3.3 If the NCC recommends that no further documentation is required. The EC and the ECRF will be submitted to DOE,RFO through ER/WM. If RFO agrees, within two working days, with the NCC

recommendation by determining that a Categorical Exclusion applies, the NEPA process is completed and the project may proceed. Section D of the DOE Guidelines (contained in Section IV of the Guide) provides a list of typical classes of action which DOE has determined normally do not require either EAs or EISs and would be categorically excluded from the requirement of submission of an ADM. Section D of the Guidelines provides general guidance only; if requirements are uncertain for a particular action, an ADM likely will be required.

6.3.4 The FPM PM or the project initiator is responsible for the auditing of the activities identified in the EC to ensure compliance with NEPA.

6.4 Action Description Memorandum

6.4.1 If recommended by the NCC or directed by DOE, an ADM will be prepared by the NEPA Division with matrix support from involved groups, as appropriate. The standard format for the ADM is shown in Appendix IV. An ADM provides information for DOE's determination of the required level of NEPA documentation. DOE specifies an ADM be prepared for all projects submitted for line item funding.

6.4.2 The NEPA Division is responsible for preparation of the ADM with support assistance from appropriate specialty areas. The ADM will be submitted to the NCC for review and submitted to RFO through ER/WM.

6.4.3 The ADM should be submitted to DOE,RFO as early as possible in the decision making process of an action to avoid schedule delays. The ADM should contain sufficient information to permit a reasonable determination of the NEPA documentation required. Information which should be included in the ADM is outlined in the DOE's NEPA Compliance Guide and related guidance. The DOE may determine one of the following apply, or may issue other appropriate direction to EG&G: (1) a Categorical Exclusion applies and the NEPA process is complete, (2) an EA is needed, or (3) an EIS is needed.

6.4.4 The NEPA Division is responsible for the auditing of the activities identified in the ADM to ensure compliance with NEPA.

6.5 Environmental Assessment

6.5.1 The NEPA Division is responsible for preparation of the EA, while funding for costs other than EG&G labor are to be included in the project budget as identified by the FPM PM or project initiator. The actual preparation of portions or all of the EA may be performed by an outside contractor, under direction from the NEPA Division and with input and review by the project initiator, support personnel from appropriate specialty groups and the NCC. The EA will be prepared according to the format and content described in Volume I, Part III-4 of the Guide and 40 CFR 1508.9 of the CEQ Regulations and related DOE guidance. Details of the review and revision cycle for the EA are directed by DOE on a case-by-case basis.

6.5.2 If the EA indicates that there will be no significant environmental impact as a result of the proposed action, a Finding of No Significant Impact (FONSI) will be prepared under the direction of the DOE. If approved, the FONSI will be issued by DOE,HQ. The FONSI will include the environmental assessment or a summary of it and will note any other environmental documents related to it

(1501.7(a)(5)). The FONSI will be prepared, circulated and disseminated per DOE direction. Following the publication of the FONSI, the project may proceed.

6.5.3 If the DOE,HQ concludes that there will be a significant impact to the quality of the human environment as a result of the proposed project, an EIS is required for the project.

6.6 Environmental Impact Statement

6.6.1 An Environmental Impact Statement (EIS) will be prepared by the DOE. The DOE may contract the preparation of the document. EG&G will provide supporting documentation, reviews, and other support as directed by the DOE.

6.6.2 At the time of a decision on a proposed project, the DOE prepares a public Record of Decision (ROD). The ROD states what the decision was and discusses alternatives and the reasons for the decision. The ROD states whether all practicable means to avoid or minimize environmental harm from all alternatives selected have been adopted, and if not, why not.

6.6.3 Following publication of the ROD, the project may proceed with DOE authorization.

7.0 RECORDS SPECIFICATIONS

The final document(s) of each project shall be dated and filed as part of the Administrative Records of the NEPA Division. These documents include:

- Environmental Checklists
- Environmental Checklist Review Forms
- Action Description Memoranda
- Environmental Assessments
- Environmental Impact Statements
- Finding of No Significant Impact
- Record of Decision
- external correspondence directly related to the above documents
- internal correspondence directly related to the above documents
- comments and responses on the above documents, as appropriate

These records retained within the NEPA Division shall be organized by project with a cross reference to authorization number and FPM PM. A master list of the documentation shall be maintained and updated weekly or as needed.

8.0 REFERENCES

8.1 Title 42, U.S.C. 4341, et seq.; The National Environmental Policy Act of 1969, as amended; Public Law 91-190; Jan. 1, 1970.

8.2 40 CFR Parts 1500-1508; "Regulations for Implementing the Procedural Provisions of NEPA"; promulgated Nov. 29, 1978; effective July 30,1979.

8.3 10 CFR Part 1021; "Compliance with the National Environmental Policy Act; Department of Energy; promulgated August 6, 1979 (44 FR 45918); effective July 30,1979.

8.4 DOE Order 5440.1C; "National Environmental Policy Act (NEPA)"; April 9,1985.

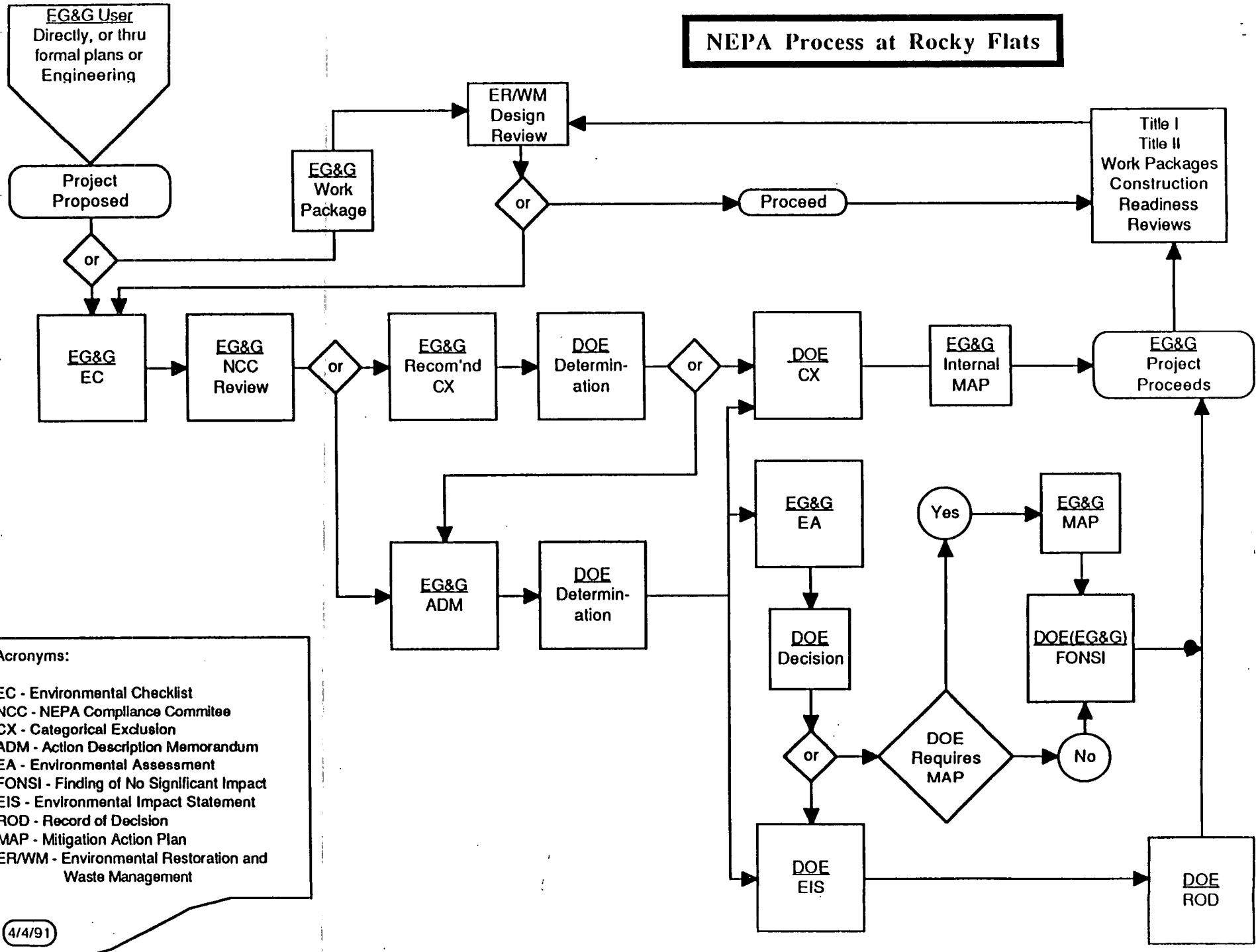
8.5 DOE; "NEPA Compliance Guide"; Oct., 1988.

8.6 AL 5440.1B; "Implementation of National Environmental Policy Act (NEPA)"; Nov.12, 1982.

APPENDIX 1

RFP NEPA DOCUMENTATION FLOWCHART

NEPA Process at Rocky Flats



APPENDIX II

ENVIRONMENTAL CHECKLIST

Form Date 4/25/91

ROCKY FLATS PLANT

NATIONAL ENVIRONMENTAL POLICY ACT DOCUMENTATION
ENVIRONMENTAL CHECKLIST

1. Date:

2. Activity/Project Name:

3. Authorization or EJO:
   ADS Number (ER/WM only):

4. Project PA:

5. Initiating Line Manager:

6. Project/Activity Description (attach pages if needed):

If possible, do not include any classified or UCNI information with this Environmental Checklist.

Include the following (incomplete ECs will be returned, delaying the review process)

- Total estimated cost,
- Schedule, and drivers for any specific due-dates,
- Quantities, volumes, measures of changes in emissions, effluents, wastes generated,
- Justification of project, referencing laws, DOE Orders, etc,
- Location of project (with maps or figures as helpful).
- Describe , explain, or clarify any checklist items marked "yes", or "unknown"; if "unknown", is there a time when the information will be available?

		Checklist		
		YES	NO	UNKNOWN
7.	Funding:			
	A. Is the project a budget line item?	___	___	___
	B. Is the funding source DOE DP?	___	___	___
8.	Statutes applicable:			
	A. Will the project require or potentially require an application for permit or permit modification under:			
	a. Clean Air Act?	___	___	___
	b. Clean Water Act?	___	___	___
	B. Does the project involve RCRA ?	___	___	___
	a. Will a RCRA permit or modification be required?	___	___	___
	b. Does the project include a RCRA removal?	___	___	___
	b. Does project include RCRA closure?	___	___	___
	- partial?	___	___	___
	- full?	___	___	___
	c. Does project include excavation or capping?	___	___	___
	d. Will cost and duration stay within $2 million and 12 months? (Explain in project description.)	___	___	___

C.	Does the project involve CERCLA?	___	___	___
	a. Does project include CERCLA removal?	___	___	___
	b. Will cost and duration stay within $2 million and 12 months? (Explain in project description.)	___	___	___
D.	Does the action threaten to violate statutory, regulatory, or permit requirements, or DOE Order?	___	___	___
E.	Will the action be in a SWMU?	___	___	___
11.	Will this project construct or require a new or expanded waste disposal, recovery, storage or treatment facility?	___	___	___
12.	Is project needed for IAG, AIP, FFCA, or other federal or state agreement? (Specify and explain any schedule urgency and deadlines in project description.)	___	___	___
13.	Is the project:			
A.	new process, building, etc. or	___	___	___
B.	a modification to an existing?	___	___	___
C.	capital equipment/machinery installation?	___	___	___
14.	Location Items:			
A.	Will the project result in, or have the potential to result in, long term changes to the environment?	___	___	___
B.	Will the action occur outside the security zone/ protected area (ie, outside Gate 8 at Post 100 and Gate 10 at Post 900)?	___	___	___
C.	Will the action take place in a wetland or floodplain?	___	___	___
15.	Will the project result in changes and/or disturbances of the following existing considerations?			
A.	noise levels	___	___	___
B.	air emissions	___	___	___
C.	liquid effluents	___	___	___
D.	solid wastes	___	___	___
E.	radioactive wastes (including contaminated soil)	___	___	___
F.	hazardous waste	___	___	___
G.	mixed waste (radioactive and hazardous)	___	___	___
H.	chemical or petroleum product storage	___	___	___
I.	water use(withdrawal of groundwater or diversion or withdrawal of surface water)	___	___	___
J.	drinking water system	___	___	___
K.	sewage disposal system	___	___	___
L.	soil movement outside facility fences or beyond SWMU boundsaries	___	___	___
M.	site clearing, excavation, or other physical alterations to grade	___	___	___

EC Prepared by: Date:

Organization: Bldg: Extension:

APPENDIX III

NEPA COMPLIANCE COMMITTEE

ENVIRONMENTAL CHECKLIST REVIEW FORM

EG&G ROCKY FLATS
NEPA COMPLIANCE COMMITTEE
ENVIRONMENTAL CHECKLIST REVIEW FORM

Project/Activity EC Date:_____

Project/Activity Name : _____

Authorization or EJO #:_____ Project PA: _____

Initiating Line Manager : _____

NEPA Compliance Committee Review (Sign & date applicable space):

	CX Recommended	ADM Recommended
NEPA :	_____	_____
Fac. Proj. Mgmt. :	_____	_____
Legal Department :	_____	_____
Fac. Safety Eng. :	_____	_____

Comments:

CEQ Section 1506.1(c) Review: Yes No

1. Project justified independently
2. Project will prejudice program decision

10 CFR 1022 Review (wetlands issue) needed:

NCC Recommendation: _____ CX recommended.

_____ ADM recommended

NEPA Mgr. Approval/Date:_____

Copies to: Project Administrator/Initiating Line Manager
NCC Committee Chairman
DOE-RFO

APPENDIX IV

STANDARD FORMAT FOR ACTION DESCRIPTION MEMORANDUM

Standard Format and Contents
For ADM Preparation

ACTION DESCRIPTION MEMORANDUM

FOR

(LIST PROPOSED ACTION)

Authorization No. ____

EG&G Rocky Flats, Inc.
Rocky Flats Plant

Operating Contractor for

U.S. Department of Energy

(Month, Year)

Preparer _____

_____

Facilities Project Management* _____

Safety Analysis Engineering* _____

Legal* _____

NEPA department* _____

NEPA department Manager _____

Director, Environmental Restoration _____

_____

* NEPA Compliance Committee

Reviewed for Classification
By:_____
Date:_____

Guidance

Note: Where the suggested text is used, verify that it is accurate. Where you modify or add new text, discuss it with appropriate personnel, as identified in parentheses.

ACTION DESCRIPTION MEMORANDUM
FOR
(LIST PROPOSED ACTION)

1.0 PURPOSE

The purpose of this Action Description Memorandum (ADM) is to provide sufficient information to permit a reasonable determination of the level of NEPA documentation required in compliance with DOE Orders 5440.1C and AL 5440.1B, "Implementation of the National Environmental Policy Act (NEPA)."

2.0 PROPOSED ACTION

Provide a brief introduction for simple actions and a detailed introduction for complex actions. Content of the introduction should be related to the complexity of the proposed action.

For example:

The proposed action specifies approximately 300 acres of land North and North West of Building 130, see figure 1, for future expansion of the Rocky Flats Plant (RFP). Information within this Action Description Memorandum (ADM) will focus upon potential environmental impacts associated with expansion of RFP into the west expansion area.

2.1 Need for the Action

Describe the situation that has created a need for this project including background information if appropriate. From a regulatory standpoint, cite Orders or standards which prompt the action. Describe what happens if the need is not met.

2.2 Location of the Action

(Facilities Project Management, User)

Where is the proposed action on plantsite? Which building? Modify the standard plant map to indicate the appropriate building or area, or provide a different map (do not show rooms on map).

The Rocky Flats Plant (RFP) is located in northern Jefferson County, approximately 16 miles northwest of downtown Denver, Colorado. The proposed action is located _____.

2.3 Concise Description of the Proposed Action

(Facilities Project Management, User)

Provide a concise description of the proposed action; include pertinent information such as:

How much area will be utilized or affected (floor square footage or acreage)?
What equipment or structures are existing on plantsite?
How is the equipment connected (physically, in glovebox, conveyor, process)?
Briefly describe the process from beginning to end, paying particular attention to radioactive and/or hazardous materials; provide a schematic drawing or flow diagram of the process or project.
How much might the project vary prior to final design?
Describe the construction plan and major phases/milestones.
Provide flow charts of process and breakdown descriptions by building area if the proposed action affects more than one building.

2.4 Alternatives to the Proposed Action

(User, Industrial Engineering)

2.4.1 No Action

Always describe the "No Action" alternative and its impacts.

2.4.2 Other

Discuss other "reasonable" alternative actions and give the reasons that the alternative is not desirable in terms of environmental impacts, safety, cost, other regulations (list with specific reference), schedule impacts, etc.

Guidance

(NEPA Division, Environmental Restoration, ...)

Describe in the following sections, any aspects of the operation being installed which might create a hazard or an environmental impact such as elevated airborne particulates, resuspension of radioactive particulates, disturbing native soils, increased air emissions, etc. Describe how the impact will be mitigated.

3.0 POTENTIAL HAZARDS AND CONTROLS

3.1 Construction Issues

(Facilities Project Management)

Assess the probable environmental effects of construction, such as site preparation, roads, excavation, utilities, parking lots, hauling, and cleanup. Three key considerations are air quality, water quality and land use. Is the proposed action in a previously developed area?

This action consists of the purchase, installation and operation of equipment or modification to structures, as specified in Section 1.4. No exterior construction activities are anticipated, and there will be no detrimental effects on air quality, water quality, and land use, no disturbance of native soils, and no resuspension of radioactive particulates.

Dust suppression during excavation activities will be conducted in accordance with the provisions at Rocky Flats Operational Safety Analysis #1 (RFOSA 1). Dust suppression for all outdoor construction activities will be in accordance with DOE Order 6430.1A, Division 1, Section 0150-4.3.

(Facilities Project Management)

How will the construction be phased so as not to disrupt other operations or not to create a new safety or environmental hazard?

Structural, architectural, and utilities modifications will be performed so as to maintain intact the building's confinement features during construction. During design, sequencing of construction is considered to ensure safe and minimal interruption of safety-related systems such as fire protection, life safety/disaster warning, and building ventilation for confinement and exhaust. All interruptions will be scheduled and coordinated during the construction phase.

3.1.1 Radiation Safety and Confinement

(Facilities Project Management, Operational Health Physics)

There is a possibility of encountering low-level radioactive contamination within the building during construction. Contamination, if encountered, will be disposed as required by DOE Order and RFP procedures. Contaminated scrap and discarded materials (site volumes and compositions) will be disposed as required by DOE Order and RFP procedures.

-- OR --

A site survey will be performed by Radiation Protection prior to any excavation activities. Contamination, if encountered, will be handled as required by DOE Order and RFP procedures.

3.1.2 Explosion

(Facilities Project Management, Fire Department)

If explosive materials are to be used (e.g, natural gas, acetylene) or combinations which could initiate an explosion exist (e.g., heat and Pu and CCL4, high pressure systems), describe the hazard and control features (e.g., berms, etc.) in detail.

Other than from commonly encountered construction hazards, there are no unique fire hazards associated with the proposed action.

3.1.3 Fire

(Facilities Project Management, Fire Department)

If there are no unique fire hazards associated with this action, the following paragraph may be appropriate.

Other than from commonly-encountered construction hazards there are no unique fire hazards associated with the proposed action. Administrative controls will be required to avoid buildup of fire fuel loading at the construction site. Construction activities will not affect the current fire detection and suppression features installed in the facility.

3.1.4 High Voltage or Current

(Facilities Project Management, Industrial Safety)

Voltages and currents used for this action are typical of those used through-out the Plant and are common hazards of industry. All electrical work will comply with applicable rules of the latest edition of the National Electric Code.

3.1.5 Hazardous Waste, Material and Other Substance

(Facilities Project Management, Environmental Restoration)

Special consideration must be given to any construction in a Solid Waste Management Unit (SWMU). Site sampling plans may be required in addition to constraints for soil removal and deposition.

Describe and quantify hazardous or mixed waste and characterize its constituents (e.g. solvents, acids, etc).

Any excavation within a Solid Waste Management Unit (SWMU) will be done in accordance with DOE, CDH, EPA and RFP procedures.

Ground water infiltration, if encountered, will be sampled and tested prior to further action in accordance with J. M. Kersh's March 19, 1990 Interoffice Correspondence subject: Procedure for Plant-Wide Control of Surface Water Discharge.

3.1.6 Mechanical

(Facility Project Management, Industrial Safety)

There are no mechanical hazards associated with the construction of the proposed system other than usual industrial hazards associated with materials transport and handling.

3.1.7 Other

(Facilities Project Management, Industrial Safety)

Describe any hazards not addressed above; e.g., overhead work, confined space entry, unusual materials or process not encountered at the plant, solid waste generation, etc.

3.2 Operational Issues

3.2.1 Radiation Safety and Confinement

(Facility Project Management, User, Operational Health Physics)

Alpha, beta, and gamma radiations are emitted by transuranic isotopes (e.g., plutonium [Pu]). The alpha, beta, and low-energy gamma radiations are absorbed by the enclosure (glovebox or container) confining/containing these isotopes. Neutrons are emitted by spontaneous fission or transuranic isotopes (e.g., Pu) and by compounds of alpha-emitters and light elements (e.g., PuF). Neutrons are moderated and absorbed by hydrogenous material (e.g., water-wall of a glovebox, concrete).

Use, as appropriate, one or the other of the next two paragraphs;

Two zones of confinement are incorporated in the design of Building __. These are classified as primary and secondary confinement areas. Zone I primary confinement is comprised of the process enclosures (e.g., gloveboxes or tanks) and their ventilation system. The Zone II secondary confinement is the processing areas surrounding Zone I enclosures, (e.g., room walls, airlocks, building structures, and ventilation systems).

-- OR --

Three zones of confinement are incorporated in the design of Building __. These are classified as primary, secondary, and tertiary confinement areas. Zone I primary confinement is comprised of the process enclosures (e.g., gloveboxes or tanks) and their ventilation system. The Zone II secondary confinement is comprised of the processing areas surrounding Zone I enclosures (e.g., room walls, airlocks, and its ventilation system). Zone III tertiary confinement is the building structures and its ventilation systems.

An air pressure differential is maintained between zones. With Zone I being the most negative, air flow is from the outside through intermediate zones to Zone I. Zone I exhaust air passes through four stages of high efficiency particulate air (HEPA) filters. Zone II (or add "and Zone III") exhaust air passes through two stages of HEPA filters. These design features ensure minimization of any release of radioactive particulates. The environment and the safety of the public will not be compromised by this action.

Selective alpha air monitors (SAAMs) are provided in exhausts and in all plutonium processing areas. SAAMs detect elevated concentrations of airborne plutonium radioactivity. When plutonium activity above preset alarm points is detected, the SAAMs actuate audible alarms, and in high noise areas, warning beacons. In addition, continuous sampling of air effluents is performed in all plutonium processing areas for later radiochemical analysis to identify low levels of airborne plutonium which may be associated with normal operations.

3.2.2 Nuclear Criticality Safety

(Facilities Project Management, Criticality Engineering, User)

This section may not be pertinent to the action. If it does apply and no provisions beyond normal procedures for handling fissile material are being considered, the following statement may be made:

Strict physical and administrative controls (e.g., Nuclear Material Safety Limits, self inspections, infraction reporting by operating personnel) will be established and are audited periodically by the contractor and DOE.

Where there is a potential for a nuclear excursion, strict physical and administrative controls will be established and audited periodically by the contractor and DOE. Processing and storage vessels which are safe-by-geometry will be provided by this action. These are...

A high level of neutron radiation, as would be the case from a nuclear excursion (criticality), is detected by criticality alarm units placed throughout the process areas and where there is the potential for a criticality. The criticality alarm system will initiate immediate evacuation of the building on detection of high neutron levels.

Where the design has features for fixed barriers against improper spacing or that are safe-by-geometry (e.g., pencil tanks, crit drains for gloveboxes), describe these design features.

This project will not involve fissile material in sufficient quantities where a nuclear excursion is possible.

3.2.3 Explosion

(Facilities Engineering, User, Fire Department)

Address unique explosion aspects associated with the operation of the proposed action. (May not be applicable.)

3.2.4 Fire

(Facilities Engineering, User, Fire Department)

Address unique fire hazards associated with the operation of the proposed action, the following paragraphs may be appropriate:

The gloveboxes will have a fire and heat detection systems connected to the plant alarm systems. The processing area is protected by an automatic wet-pipe fire suppression system, with manual fire-fighting equipment provided.

3.2.5 High Voltage or Current

(Facilities Project Management, User, Industrial Safety)

3.2.6 Hazardous Wastes, Materials and Other Substances

(Facilities Project Management, User, Industrial Safety)

Any hazardous or mixed waste that might be generated as a result of this action will be handled in accordance with the requirements of the Resource Conservation and Recovery Act (RCRA) as implemented in the Colorado Hazardous Waste Regulations (6 CCR 1007-3).

3.2.7 Mechanical

(Facilities Project Management, Users, Industrial Safety)

There are no mechanical hazards associated with this action other than usual industrial hazards associated with materials transport and handling.

3.2.8 Other Hazards

(Facilities Project Management, User, Industrial Safety)

Describe any hazards associated with the operation of the proposed action not addressed above; e.g., unusual materials processed, etc...

3.3 Postulated Accidents

(Safety Analysis)

If it is determined that the proposed action does not present an Unreviewed Safety Question and does not impact or significantly increase risks to the public as postulated in the Final Environmental Impact Statement for RFP (DOE/EIS-0064), the following paragraphs may be used. However, decisions supporting this conclusion must be traceable or included as an appendix for this ADM.

This project involves only hazards of a type and magnitude routinely encountered at RFP and no additional safety analysis is required (per DOE Order 5481.1B "Safety Analysis and Review System"). Maximum credible accidents (MCAs) and risk to the public postulated in the Final Environmental Impact Statement for RFP (RFP/EIS-0064) are not impacted or significantly increased by this proposed action.

If it is determined that an Unreviewed Safety Question may be involved, there must be a revision to the appropriate Safety Analysis Report, which is then approved by the DOE during Conceptual Design or Title I, or prior to implementing the proposed action.

This project may involve hazards classified as _____ per DOE Order 5481.1B, "Safety Analysis and Review System," which will require additional safety analyses to determine its impact on existing Final Safety Analysis Reports (SARs), need to develop a Preliminary SAR, or other safety analysis documentation.

3.4 Impacts from Operational Effluents

(Environmental Restoration, CAER , CWAD)

Assess the probable health and environmental impacts from routine effluents (liquid) and emissions (air/gas and airborne particulates).

3.5 Summary of Cumulative Impacts

This section is optional to those projects which consist of multiple subprojects (e.g., building upgrades, modifications, etc.).

(Facility Project Management)

3.5.1 Production Throughput

This action is primarily a like-for-like replacement of existing systems. Although the proposal is not intended to provide additional capacity for plutonium recovery, replacement of deteriorated systems with modern units may increase product throughput and yield.

3.5.2 Extension of the Facilities Operating Life

Replacement of projects incorporated in this ADM represent 18%, by square footage, of Building 771. Manufacturer estimates of the expected useful operating life of equipment to be installed is 10 to 20 years.

4.0 REGULATORY COMPLIANCE

4.1 Resource Conservation and Recovery Act (RCRA)

4.1.1 Construction

(Environmental Restoration)

The proposed action does not entail construction or excavation within a designated Solid Waste Management Unit (SWMU).

-- OR --

Any construction or excavation within SWMU # _ will be done in accordance with all State, EPA and RFP procedures. Basic requirements for construction within the SWMU will include but are not limited to the following:

- Construction within the SWMU will be done in conjunction with a site sampling plan to be presented to the EPA. Following review of the plan, site characterization sampling will be completed and a health and safety plan developed for construction work.

- Soil from the SWMU will not be removed from the SWMU. Deposition of soil will be done in a manner as to prohibit its spread (by wind, erosion, etc) outside of the SWMU boundary.

4.1.2 Operations

Any hazardous or mixed waste that might be generated as a result of this action will be handled in accordance with the requirements of RCRA as implemented in the Colorado Hazardous Waste Regulation (6 CCR 1007-3).

4.2 National Pollutant Discharge Elimination System (NPDES)

(ER/Clean Water Act department)

The proposed action will not impact generated liquid effluents and therefore, will not impact the Plant Environmental Protection Agency National Pollutant Discharge Elimination system permit.

-- OR --

The proposed action may impact (e.g., surface water, ground water) protection activities and the Plant Environmental Protection Agency National Pollutant Discharge Elimination system permit. Potential impacts are a resultant of...

4.3 Clean Air Act (CAA)

(ER/Clean Air & Environmental Reporting department)

Airborne emissions of hazardous materials may be impacted by the proposed action. An application for approval by the Environmental Protection Agency of new construction may be required under the Clean Air Act as implemented in 40 CFR 61, Subparts A&H. Air Pollution Emissions Notices (APENs) may be required by the Colorado Department of Health (CDH) for any new air emissions points for toxic materials.

4.4 NEPA Specific Considerations

(NEPA division)

The proposed action is categorized as further development within Rocky Flats Plant (RFP) site. There will be no adverse effect on:

- o Wetlands
- o Floodplains
- o Historical, Cultural or Archaeological Resources
- o Threatened and Endangered Species

Consultation with the U.S. Army Corps of engineers was conducted in the fall of 1989. The general location of jurisdictional wetlands on plantsite were characterized. It has been subsequently determined that the proposed action is not located in, nor in a position to have an effect upon, known jurisdictional wetlands.

The proposed action is not located in a designated 100-year floodplain.

In a letter to A.E. Whiteman, Manager of the Department of Energy Rocky Flats Area Office, the Colorado State Historical Preservation Officer, B. Sudler, stated that "There will be no effect to significant cultural resources by further development within Rocky Flats Plant, provided [two specified sites] are avoided." These sites were identified in *An Archaeological and Historical Survey of selected parcels within the Department of Energy, Rocky Flats Plant,* and will not be affected by the proposed action.

The USFWS has identified the bald eagle and the black-footed ferret as endangered species of interest at the plant. This action would not be considered to impact the bald eagle habitat. Surveys for black-footed ferrets would be required only if prairie dog colonies would be affected. The proposed action is not to be in an area of current or potential colonization by prairie dogs.

The proposed action will not impact Indian lands or religious sites.

Supply answers to the following issue:

- *Is the project part of a larger proposed action that is or may be the subject of an Environmental Assessment or Environmental Impact Statement?*

4.5 Permit Summary

Provide a summary of all permits required for implementation of the proposed action (e.g., excavation, RCRA, APEN, NPDES, etc.).

5.0 FISCAL AND SCHEDULE INFORMATION

(Facilities Project Management/Industrial Engineering)

The total estimated cost of this action is _____.

The funding source of the proposed action is _____.

(e.g., General Plant Projects, Line Item Project, Expense Funds)

The first year of funding is planned for FY__, with completion estimated by ___.

Previous titles of the proposed project are _____.

If segmented funding is being requested, describe the relationship of this project to others. Describe historical background of any previous funding efforts. Attach a schedule of the proposed concept, design, and construction . Operational readiness date should be discussed to corroborated the need for action.

6.0 ADDITIONAL DOCUMENTATION

(Performance Assurance/Requirements Identification)

List agencies and/or persons consulted in preparation of the environmental documentation, including coordination with federal, state, regional, or local agencies.

This project will comply with DOE Orders _____.

Include potential requirements of the Nuclear Quality Assurance 1 (NQA-1), (e.g., production equipment, design control, test control, etc.).

Standard operating procedures will be written for any new equipment and/or systems.